

## IN THE CLAIMS

Please replace any previous listing of the claims with the following replacement listing of the claims:

### Replacement Listing of the Claims

1. (CURRENTLY AMENDED) A data monitoring system in a communication network comprising:

- a mobile station;

- a base station that communicates with the mobile station;

- a mobile station-packet data serving node monitoring system (MPMS);

- a first packet data collecting device;

- a packet data serving node (PDSN) supporting a data communication service of the mobile station;

a global position system (GPS) receiver that provides a time information received from the GPS to the first packet collecting device, wherein said mobile station receives the time information from the GPS;

wherein the first packet data collecting device collects, together with the GPS time information provided by the GPS receiver, a communication protocol and a communication environment information between the base station supporting a mobile communication service of the mobile station and the PDSN, and provides the collected information to the MPMS, and wherein the MPMS receives at least one of a wireless communication environment, a data communication environment, and a mobile communication protocol of the mobile station from the mobile station along with the GPS time information, at least one of a packet data communication environment and a data communication protocol of the mobile station from the first packet data collecting device along with the GPS time information, and monitors and analyzes the received information on a

single time axis in time synchronization regardless of a time delay due to a distance between the MPMS and the first packet data collecting device; and

a second packet data collecting device to collect at least one of a communication protocol and a communication environment information between the PDSN and an application server along with the time information provided from the GPS receiver, and provide the received information to the MPMS, wherein the MPMS receives at least one of the wireless communication environment, the data communication environment, and the mobile communication protocol of the mobile station from the mobile station along with the time information of the GPS receiver, receives at least one of the packet data communication environment and the data communication protocol of the mobile station from the second packet data collecting device along with the time information, and monitors and analyzes the received information on a single time axis.

2. (CANCELED)

3. (CURRENTLY AMENDED) The system of claim 21, further comprising a computing device to receive the communication environment information and the communication protocol via the MPMS and store, monitor, and analyze the received information, the communication protocol and the communication environment information being received from at least one of the mobile station, the first and second packet data collecting devices.

4. (CURRENTLY AMENDED) A data monitoring method in a communication network comprising:

a first data communication network monitoring step of collecting at a first location at least one of a communication protocol and a communication environment information between a base station supporting a mobile communication service of a mobile station and a packet data serving node

(PDSN) supporting a data communication service of the mobile station along with a global position system (GPS) time information received at the first location;

a mobile communication network monitoring step of collecting at least one of a wireless communication environment, a data communication environment, and a mobile communication protocol of the mobile station along with the GPS time information received by the mobile station at a second location; and

a step of monitoring and analyzing the data collected in the first data communication monitoring step and the mobile communication network monitoring step on a single time axis in time synchronization regardless of a time delay due to a distance between the first and second locations;

a second data communication network monitoring step of collecting at least one of a data communication protocol and a packet data communication environment information between the PDSN and an application server along with the GPS time information; and

a step of monitoring and analyzing the data collected in the second data communication network monitoring step and the mobile communication network monitoring step on a single time axis.-

5. (CANCELED)

6. (CURRENTLY AMENDED) The method of claim 5-4, further comprising a step of providing a computing device with the data collected in the mobile communication network monitoring step, the first and the second data communication monitoring steps, and storing, monitoring and analyzing the data.